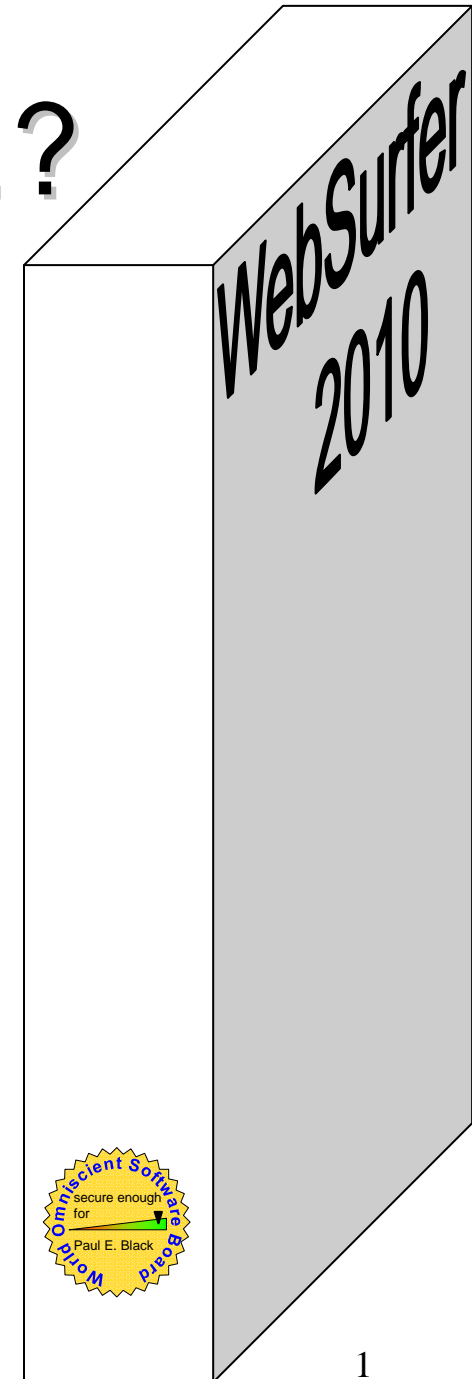
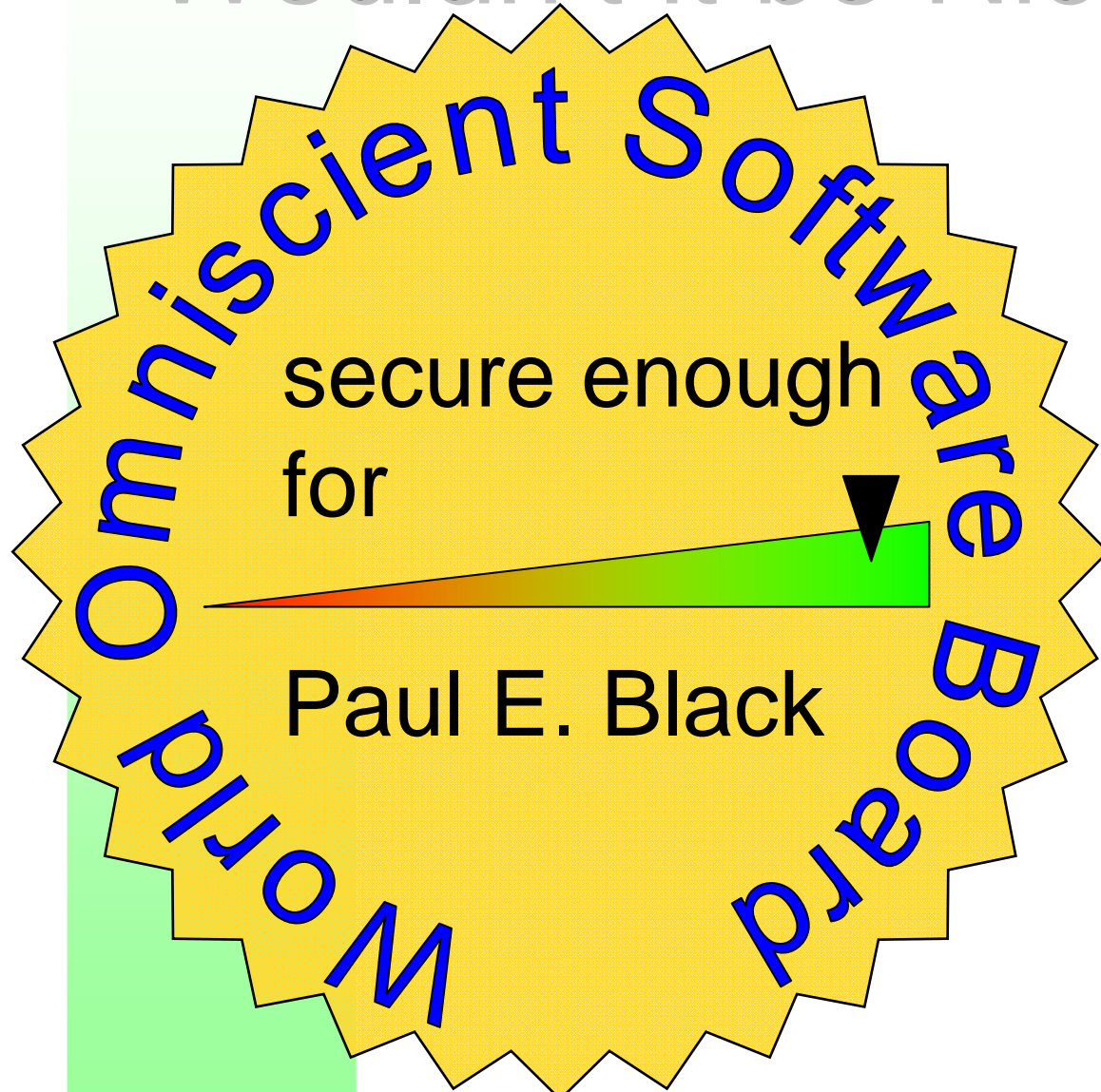


Wouldn't it be Nice ...?



24 March 2010

NIST

Paul E. Black

National Institute of Standards and Technology • U.S. Department of Commerce



What are the Goals?

- Inform “buy” decision
 - Convey secure settings
 - Feed confidence and assessments
 - Lead to more secure software
-
- Contact
 - Daniel G. Wolf
 - Software Assurance Consortium
 - Paul E. Black
 - NIST



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Possible Content: People/Process

- **People**

- Is there code accountability or responsibility assigned?
- Is there a trained, certified, or accredited application security “Software Engineer”?

- **Process**

- Secure coding practices followed
- Was a threat model defined?
- Are there requirements?
- Testing methodology
 - Black box, unit security testing, penetration testing, ...
- Tested on what platforms?
- Code reviewed? other than by developers? for security?
- Static analysis

Possible Content: Software Itself

- **Pedigree:** amount from libraries, from Open Source, compiler
- **Design:** encryption, single points of failure, architecture signed off by app sec certified software engineer
- **Provenance:** protection of code in supply chain
- **Traits:** all communication over SSL, uses Internet or email
- **Size:** lines of code, function points, number of modules
- **What and where are configuration files?**
- **% “banned” APIs, # “unforgivable vulnerabilities”**

Audiences & Scope

1. **Small businesses (dentist, dry cleaner, accountant, plumber, restaurant)**
 - General applications running on general purpose hardware (accounting package on a “PC”)
2. **Integrators (incoming software is just one piece)**
3. **Naïve home users (my brother)**
 - General applications (not OS or security-specific)

